CLAIMS

1   1.   A method for media streaming, comprising:

2   receiving a request from a client to a server via a

3 network in accordance with a Hypertext Transfer Protocol

4 (HTTP) to stream a media file of a given type;

5   passing the request to a servlet running in

6 conjunction with the server;

7   parsing the request using the servlet to identify

8 elements of the media file to be transferred to the

9 client; and

10   streaming the identified elements from the server

11 to the client as a HTTP response.

1   2.   A method according to claim 1, wherein parsing the

2 request comprises determining a processing action to be

3 applied to the elements of the media file, and wherein

4 streaming the identified elements comprises applying the

5 processing action to the elements.

1   3.   A method according to claim 2, wherein parsing the

2 request comprises determining a parameter applicable to

3 the processing action, and wherein applying the

4 processing action comprises processing the elements of

5 the media file responsive to the parameter.

1   4.   A method according to claim 3, wherein determining

2 the parameter comprises determining a limitation on a

3 media playing capability of the client, and wherein the

4 processing action comprises modifying the identified

5 elements in response to the limitation.

1   5.   A method according to claim 4, wherein determining

2 the limitation comprises identifying a network

3 bandwidth, and wherein modifying the identified elements

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4   in response to the limitation comprises altering the
5   elements responsive to the network bandwidth.

1   6.   A method according to claim 4, wherein determining
2   the limitation comprises determining a resource level
3   provided by the client, and wherein modifying the
4   identified elements comprises selecting the identified
5   elements responsive to the resource level.

1   7.   A method according to claim 2, wherein applying the
2   processing action comprises transcoding at least one of
3   the elements of the media file into a desired media
4   format.

1   8.   A method according to claim 1, wherein receiving
2   the request comprises receiving a request for a certain
3   portion of the media file, and wherein parsing the
4   request comprises selecting the elements of the media
5   file to be transferred responsive to the request.

1   9.   A method according to claim 8, wherein the elements
2   of the media file comprise an ordered sequence of
3   frames, and wherein selecting the elements comprises
4   selecting a segment within the sequence.

1   10. A method according to claim 8, wherein the elements
2   of the media file comprises a plurality of media tracks
3   temporally juxtaposed in parallel, and wherein selecting
4   the elements comprises selecting one or more of the
5   tracks.

1   11. Apparatus for media streaming, comprising a server
2   which is arranged to receive a request from a client via
3   a network in accordance with a Hypertext Transfer
4   Protocol (HTTP) to stream a media file of a given type,
5   and which is further arranged to run a servlet and to

6   pass the request to the servlet, to parse the request

7   using the servlet to identify elements of the media file

8   to be transferred to the client, and to steam the

9   identified elements from the server to the client as a

10   HTTP response.

1   12. Apparatus according to claim 11, wherein the server

2   is arranged to use the servlet to parse the request so

3   as to determine a processing action to be applied to the

4   elements of the media file, and to apply the processing

5   action to the elements.

1   13. Apparatus according to claim 12, wherein the server

2   is arranged to use the servlet to determine a parameter

3   applicable to the processing action, and to apply the

4   processing action based on the parameter.

1   14. Apparatus according to claim 13, wherein the

2   parameter is indicative of a limitation on a media

3   playing capability of the client, and wherein the server

4   is arranged to apply the processing action so as to

5   modify the identified elements in response to the

6   limitation.

1   15. Apparatus according to claim 14, wherein the

2   limitation applies to a network bandwidth, and wherein

3   the server is arranged to use the servlet to modify the

4   identified elements in response to the network

5   bandwidth.

1   16. Apparatus according to claim 14, wherein the

2   limitation applies to a resource level provided by the

3   client, and wherein the server is arranged to use the

4   servlet to select the identified elements in response to

5   the resource level.

1   17. A method according to claim 13, wherein the
2   processing action comprises transcoding at least one of
3   the elements of the media file into a desired media
4   format.

1   18. Apparatus according to claim 11, wherein the
2   request is for a certain portion of the media file, and
3   wherein the server is arranged to use the servlet to
4   parse the request so as to select the elements of the
5   media file to be transferred responsive to the request.

1   19. Apparatus according to claim 18, wherein the
2   elements of the media file comprise an ordered sequence
3   of frames, and wherein the server is arranged to use the
4   servlet to select a segment within the sequence
5   responsive to the request.

1   20. Apparatus according to claim 18, wherein the
2   elements of the media file comprises a plurality of
3   media tracks temporally juxtaposed in parallel, and
4   wherein the server is arranged to use the servlet to
5   select one or more of the tracks responsive to the
6   request.

1   21. Apparatus according to claim 11, wherein the server
2   comprises a cluster of servers, arranged so that the
3   HTTP request is handled by one of the servers in the
4   cluster, and the servlet is run on a different one of
5   the servers in the cluster.

1   22. A computer software product for media streaming,
2   comprising a computer-readable medium in which program
3   instructions are stored, which instructions, when read
4   by a computer, cause the computer to receive a request
5   from a client via a network in accordance with a

6   Hypertext Transfer Protocol (HTTP) to stream a media

7   file of a given type, and which instructions further

8   cause the computer to run a servlet and to pass the

9   request to the servlet, to parse the request using the

10   servlet to identify elements of the media file to be

11   transferred to the client, and to steam the identified

12   elements from the server to the client as a HTTP

13   response.

1   23. A product according to claim 22, wherein the

2   instructions cause the computer to use the servlet to

3   parse the request so as to determine a processing action

4   to be applied to the elements of the media file, and to

5   stream the identified elements by applying the

6   processing action to the elements.

1   24. A product according to claim 23, wherein the

2   instructions cause the computer to use the servlet to

3   determine a parameter applicable to the processing

4   action, and to apply the processing action based on the

5   parameter.

1   25. A product according to claim 24, wherein the

2   parameter is indicative of a limitation on a media

3   playing capability of the client, and wherein the

4   instructions cause the computer to apply the processing

5   action so as to modify the identified elements in

6   response to the limitation.

1   26. A product according to claim 25, wherein the

2   limitation applies to a network bandwidth, and wherein

3   the instructions cause the computer to use the servlet

4   to modify the identified elements in response to the

5   network bandwidth.

1   27. A product according to claim 25, wherein the
2   limitation applies to a resource level provided by the
3   client, and wherein the instructions cause the computer
4   to use the servlet to select the identified elements in
5   response to the resource level.

1   28. A product according to claim 24, wherein the
2   processing action comprises transcoding at least one of
3   the elements of the media file into a desired media
4   format.

1   29. A product according to claim 22, wherein the
2   request is for a certain portion of the media file, and
3   wherein the instructions cause the computer to use the
4   servlet to parse the request so as to select the
5   elements of the media file to be transferred responsive
6   to the request.

1   30. A product according to claim 29, wherein the
2   elements of the media file comprise an ordered sequence
3   of frames, and wherein the instructions cause the
4   computer to use the servlet to select a segment within
5   the sequence responsive to the request.

1   31. A product according to claim 29, wherein the
2   elements of the media file comprises a plurality of
3   media tracks temporally juxtaposed in parallel, and
4   wherein the instructions cause the computer to use the
5   servlet to select one or more of the tracks.

1   32. A product according to claim 22, wherein the
2   servlet comprises a subset of the instructions, and the
3   subset of the instructions comprises instructions
4   written in a platform-independent, object-oriented
5   computer language.